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FUEL OIL NEWS

1992 SOURCE BOOK

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Good, bad or indifferent? However 1992 shakes out for the heating oil industry, marketers can bet that about half the preseason predictions will be correct while the other half will be dead wrong. For a definitive look at where the industry stood in 1991, however, our yearly profile of marketers begins on page 17. *Photo courtesy of Greystone Services Inc.*

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The Oil Heat Industry: 1991

Our 14th annual profile of marketers.

By George Schultz
Associate Publisher

The first time *Fuel Oil News* conducted its annual industry profile a Democrat was president. In the 13 years since then, the industry has evolved tremendously and has weathered many storms... the "desert" variety being just one of them.

Right now, what the industry needs is a good snow storm, or at least a protracted spell of cold weather, to negate the effects of two consecutive mild winters that saw heating oil volume shrink and equipment replacements dwindle. Fortunately, the warm weather stymied competitive fuel intrusions and conversions because oil heat users didn't have much to complain about, but utilities once again are attempting to erode oil heat's marketshare via aggressive advertising, promotion and give-aways.

Our annual industry profile has documented many trends in computerization, fuel treatment and equipment sales. In all, we have provided the industry with important statistics that have helped and will continue to help marketers and industry suppliers in making decisions concerning the future of their businesses. We believe this function is important, whether or not the industry is in a crisis.

TABLE 1
Type of Petroleum Sold (% of readers)

	Fuel Oil	Gasoline
New England	100.0	9.8
Mid-Atlantic	100.0	34.1
South	100.0	79.4
Midwest	97.6	92.7
West	100.0	78.0
All Sections	**99.5**	**58.8**

TABLE 2
Petroleum Revenue as a Percent of Total Business Income

New England	77.9
Mid-Atlantic	80.4
South	80.3
Midwest	74.9
West	90.1
All Sections	**79.7**

Thanks for Your Help

As always, we have to thank our readers for assisting us in compiling the statistics contained in this study. Each fall we mail out complicated questionnaires to a random group of marketers throughout the U.S. These forms contain more than 150 questions, covering virtually every aspect of their operation. We're always amazed at the excellent responses that we receive from marketers, far above what so-called experts claim can be anticipated from such a survey.

We use a random method of sampling in order to get answers that are statistically valid. Also, we don't want to bother the same dealers year after year, even though if we did we might get data that would be more easily tracked and plotted.

In any event, thanks to the many marketers who completed our questionnaire, whoever they are. Until somebody comes along with a more scientific approach that's manageable, we'll stand behind these figures as an accurate assessment of the heating oil industry and the many thousands of people who earn their livings in it.

Who Are They?

We always start off our survey by

TABLE 3
Sources of Business Income (% of total business income)

	FUEL OIL				GASOLINE			
	Retail		Bulk		Retail		Bulk	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
New England	100.0	—	2.4	12.2	4.9	2.4	2.4	4.9
Mid-Atlantic	100.0	—	2.4	9.8	12.2	7.3	9.8	14.6
South	70.6	20.6	32.4	23.5	55.9	11.8	29.4	20.6
Midwest	68.3	17.1	51.2	26.8	61.0	24.4	58.5	14.6
West	63.4	12.2	46.3	19.5	34.1	22.0	53.7	7.3
All Sections	**80.5**	**10.0**	**26.9**	**18.4**	**33.6**	**13.6**	**30.8**	**12.4**

TABLE 4
Petroleum Products Sold
(% of total volume)

	No. 2	No. 1	No. 4	Nos. 5&6	No. 2 for Diesel	Gasoline	Lpg/Lng	Other
New England	86.4	4.3	1.6	1.6	7.7	2.4	1.0	0.7
Mid-Atlantic	76.1	4.4	*	*	8.7	11.2	*	*
South	37.9	12.2	6.7	*	22.2	31.2	1.8	*
Midwest	31.4	5.6	0.3	*	20.9	33.2	5.4	0.2
West	29.3	5.8	*	0.5	26.9	33.0	2.6	1.6
All Sections	**52.2**	**6.5**	**1.7**	**0.4**	**17.3**	**22.2**	**2.2**	**0.5**

* - Less than 0.1%

trying to ascertain what businesses our respondents pursue. **Table 1** shows that 99.5% of the people answering our questionnaire sell fuel oil, and 58.8% of them also sell gasoline.

In past years we've made a big deal over the fact that the gasoline portion was slowly accelerating, suggesting that marketers were becoming more diversified. **Figure 1**, however, shows that the gasoline percentage seems to be cyclical — it went up after our initial survey in 1978, then fell for the next two years, shot back up in 1982, then fell for three years before jumping up again in '86. It had been on a downward slide since then, but this year it's starting in the upward direction for what might be another cycle. It's about 2.8% above 1990.

Market conditions are very much a factor in this phenomenon. In 1979 there was a gasoline shortage with an accompanying price escalation. Marketers were quick to take advantage of the situation by selling more motor fuel. In 1982 we were in the midst of the first oil glut; motorists were tired of conserving and started to drive more so marketers sold more gasoline.

The same thing happened in '86 when pump prices dropped to the lowest point in several years, thereby increasing demand and marketer sales. This year's increase could be a reflection of the mild winter that saw more people take to the roads instead of sitting home.

The percentage of respondents who sell fuel oil has stayed pretty much even over the last 12 years. Actually, this year's figure is the highest we've ever recorded. It's important to note, however, that the regional percentages continue to show the same trends as in past years, particularly in the gasoline category. Marketers outside the Northeast are much more likely to sell gasoline than their counterparts in New England and the Mid-Atlantic.

The Northeast gasoline percentages are actually down from last year — most significantly in New England. This decrease comes despite the fact that last year's survey was done in the midst of the Iraqi situation when gasoline price increases were the principal media focus.

Table 2 shows a slight upward change of about 3% from our last survey. Does this mean fewer marketers are relying on non-petroleum product and service revenue? Perhaps, but it's difficult to say this with confidence. This year's figure goes against a downward trend over the past three years. The Northeast and South were down as much as five points from 1990, but the Midwest and

TABLE 5
Average Size of Business

	Home Fuel Oil Accts	No. of C/I Accts	Gals. of Distillate	Gals. of Residual	Gals. of Gasoline	No. of Empls
New England	1,514	121	1,948,276	1,480,000	1,500,000	9.4
Mid-Atlantic	1,900	273	1,686,094	638,333	3,302,909	12.1
South	939	87	2,408,000	578,800	2,951,500	8.5
Midwest	559	190	1,239,516	*	1,591,400	11.6
West	1,597	249	2,328,438	878,000	3,548,269	10.7
All Sections	**1,302**	**184**	**1,922,065**	**893,783**	**2,578,816**	**10.5**

* - Insufficient Data

TABLE 6
Annual Heating Oil Sales by Types of Customers
(% of total customers served)

	Private Homes	Apts	Education	Hospitals	Commercial	Indus
New England	88.0	4.8	0.4	0.1	6.1	0.8
Mid-Atlantic	85.6	5.6	0.4	0.1	7.1	1.3
South	72.8	2.6	0.5	2.6	16.4	6.6
Midwest	75.0	3.5	3.2	0.9	10.2	5.7
West	73.0	1.3	1.6	3.2	17.4	9.1
All Sections	**78.9**	**3.6**	**1.2**	**1.3**	**11.4**	**4.7**

West were up some 15%. So the decreases in the Northeast were offset by increases in the other sections of the country, making for an overall net gain of 3.1%.

This is the eighth time we've asked this question. Dealers in 1986 said petroleum product sales accounted for 87.2% of their revenue. That was the highest percentage recorded on this question.

A Closer Look

We've thus established that virtually all our respondents sell fuel oil, a clear majority sell gasoline, and petroleum products represent better than 75% of their income.

Next we polled marketers to determine how important retail and wholesale sales of these products are to their operation. We asked them to list these products as either primary or secondary sources of income in their overall operations and the result is shown in **Table 3**.

Just more than 80% said retail fuel oil is a primary source of income for them, although the responses from the various regions weren't identical.

Once again, Northeast marketers are more heavily involved in retail fuel oil sales, with all respondents saying that it is a primary source of income. As a result, no one in the New England or Mid-Atlantic regions said that it was only a secondary source. Marketers in other sections of the country are less dependent on retail fuel oil sales. All three of the other sections are actually below the 1990 totals.

Bulk fuel oil sales are primary to about 27% nationally, but the same differences are evident here between the Northeast and the other sections. New England and Mid-Atlantic dealers depended less on bulk sales, either as a primary or secondary source of business income, than marketers in other areas of the country.

The importance of retail and wholesale gasoline sales also shows the same geographical differences. Only a small percentage of the Northeasterners depend on gasoline, retail or wholesale, as either a primary or secondary source of business income.

Retail gasoline is a major source to more than half of the Midwesterners and Southerners and more than 34% of Westerners. Bulk gasoline is primary to more than half of the Western marketers, a change from the last survey.

All the national averages in Table 3 are within a few points of last year's totals except primary bulk gasoline, which jumped from 15.5% in 1990 to 30.8% this year. This number is close to the figure

Fig. 1: Percentage of Marketers Selling Fuel Oil & Gasoline 1978-1991

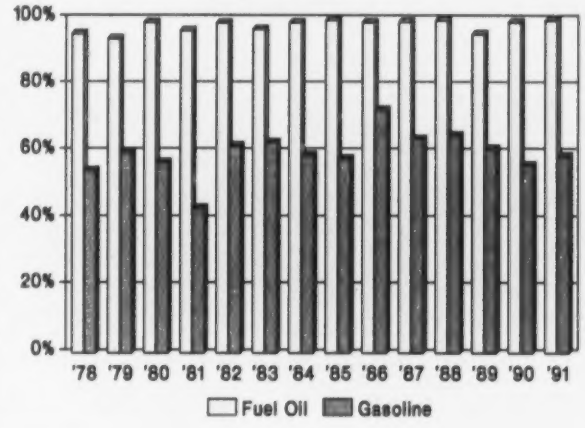


TABLE 7
Total Annual Company Dollar Revenues
(% of marketers in each category)

	Less than 1 Million	$1-$5 Mil.	$5-$10 Mil.	$10-$25 Mil.	$25 Mil. +
New England	40.0	55.0	2.5	1.3	1.2
Mid-Atlantic	37.1	40.0	11.4	8.5	3.0
South	35.5	32.3	16.1	12.9	3.2
Midwest	29.3	43.9	19.5	4.9	2.4
West	23.1	46.2	20.5	5.1	5.1
All Sections	**33.0**	**43.5**	**14.0**	**6.5**	**3.0**

TABLE 8
Pre-Tax Earnings
(% of marketers in each category)

	Less than $50,000	$50,000 - $100,000	$100,000 - $200,000	$200,000 - $500,000	$500,000 +
New England	47.1	26.5	11.8	11.8	2.9
Mid-Atlantic	51.9	14.8	24.1	6.9	*
South	44.4	29.6	11.1	11.1	3.7
Midwest	36.8	42.1	13.2	7.9	*
West	33.3	30.3	18.2	16.4	1.8
All Sections	**42.7**	**28.7**	**15.7**	**10.8**	**1.7**

TABLE 9
EDP Use
(% of marketers using computers)

New England	78.0
Mid-Atlantic	82.9
South	48.6
Midwest	63.4
West	63.4
All Sections	**67.3**

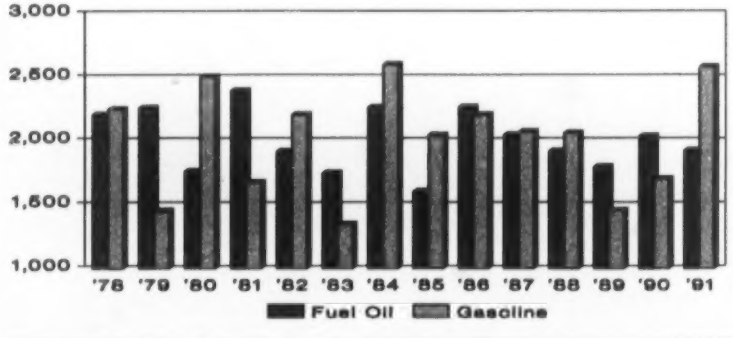
TABLE 10
Computer Applications
(% of marketers using EDP for listed operations)

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Accts Rec/Billing	78.1	91.2	94.1	76.9	88.5	85.8
General Ledger	56.3	79.4	88.2	84.6	76.9	77.1
Accts Payable	56.3	70.6	82.4	69.2	76.9	71.1
Excise Tax	43.8	50.0	64.7	50.0	65.4	54.8
Word Processing	56.3	67.6	47.1	42.3	53.8	53.4
Delivery Sched	68.8	76.5	58.8	26.9	34.6	53.1
Payroll	28.1	50.0	52.9	46.2	69.2	49.3
Inventory Recon	40.6	38.2	58.8	69.2	38.1	49.0
Fixed Assets	31.3	32.4	70.6	38.5	38.5	42.3
Pricing Analysis	31.3	8.8	23.5	23.1	30.8	23.5
Supplier Costs	9.4	26.5	41.2	15.4	23.1	23.1
Oil Price Info	9.4	26.5	17.6	19.2	23.1	19.2
Comm w/Stations	3.1	8.8	11.8	15.4	42.3	16.3

TABLE 11
Trucks Per Marketer

	Average No. Delivery Trucks	Trailers	Average Size (In gals.) Largest	Smallest	Opt. Size Preferred
New England	3.3	0.4	2,916	2,424	2,841
Mid-Atlantic	4.4	2.7	3,089	2,571	3,029
South	4.4	2.4	2,267	1,715	2,114
Midwest	3.1	2.0	2,236	1,874	2,284
West	4.7	2.6	3,060	1,990	2,608
All Sections	**4.0**	**2.0**	**2,714**	**2,115**	**2,575**

Fig. 2: Average Marketer Volume in Gals. of Fuel Oil & Gasoline 1978-1991 (add 000)



reported in 1989. The figure last year might have been influenced by the Iraqi situation — few independents can compete with the majors on price in an escalating market.

Table 4 breaks down sales of petroleum products even further and shows the average percentages of home heating oil, commercial and industrial fuels, diesel, gasoline, etc. No.2 oil is still the biggest seller, accounting for more than half of all petroleum product sales nationwide.

The regional picture shows a slightly different story, however. New England and Mid-Atlantic marketers have a very high percentage of No.2 oil, while the other regions have a greater mix among products handled. One should note that sales of kerosene (No.1), as well as commercial and industrial fuels, are an insignificant portion of the total, accounting for less than 12% even when added to Lpg and "other" (lubes and machine oils). The only real sellers are No.2, diesel and gasoline.

Size of Businesses

Table 5 attempts to provide some averages as to the volume and number of accounts served by heating oil merchants. This year's average volume of 1.922 million gals. of fuel oil is down just 80,000 gals. from 1990. This drop is attributable to the mild winter of 1990-'91 because the decrease is significant in the Northeast where record warm temperatures made supplies languish in storage instead of being used to heat homes and businesses. The other regions actually gained some over the previous year.

Figure 2 shows that the average volume has been cyclical in the 13 years we've been publishing this study. There was a downward trend beginning in 1986 in both fuel oil and gasoline volume, but last year saw what might be the beginning of a reversal, at least in gasoline sales.

Gasoline volume, as noted in Figure 2, is up significantly from last year. The rise in pump price after Iraq invaded Kuwait didn't last and the warm winter with virtually no snow in the Northeast meant that people used their cars more than normal, thus pushing up gasoline usage. Also, since marketers weren't selling much fuel oil, they had to hustle some added gasoline sales to make ends meet.

The average number of customers per marketer is down again this year as shown in **Figure 3**. The drop of 700 from 1990 to a national mean of 1,302 customers per marketer is just about where this figure stood in 1989, suggesting that perhaps 1990 was an exception in terms of the sample.

New England, Mid-Atlantic and Western marketers average more than 1,500 customers each. Lower figures in the South and Midwest pull the overall average down. Acquisitions and consolidations do have something to do with this phenomenon. Because of mergers there are fewer dealers, and these kinds of changes tend to result in some losses to other fuels by

TABLE 12
Engines by Type (% of readers)

	USE			PREFER	
	Diesel	Gasoline	Both	Diesel	Gasoline
New England	65.9	2.4	31.7	82.9	4.9
Mid-Atlantic	52.5	15.0	32.5	80.0	10.0
South	3.9	48.4	48.4	41.9	35.5
Midwest	22.0	34.1	41.5	56.1	24.4
West	27.5	20.0	52.5	57.5	25.0
All Sections	**34.2**	**24.0**	**41.3**	**63.7**	**20.0**

Truck Tanks by Type (% of readers)

	USE			PREFER	
	Steel	Alum	Both	Steel	Alum
New England	15.8	42.1	39.5	13.2	76.3
Mid-Atlantic	15.0	35.0	50.0	5.0	77.5
South	50.0	6.7	43.3	26.7	46.7
Midwest	68.3	4.9	17.1	31.7	26.8
West	32.4	18.9	48.6	24.3	59.5
All Sections	**36.3**	**21.5**	**39.7**	**20.2**	**57.4**

Fig. 3: Average Number of Residential Fuel Oil Customers 1978-1991

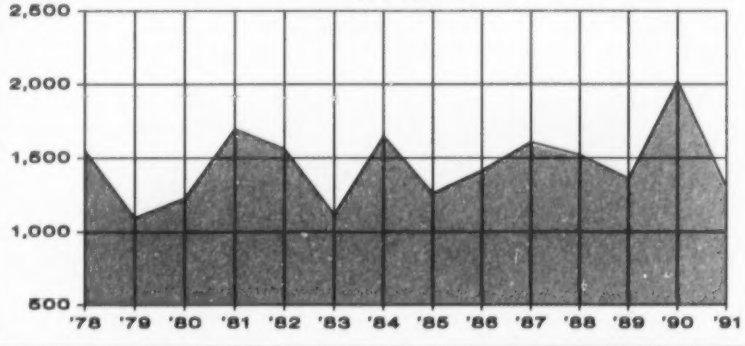


TABLE 13
Average Age of Trucks

	Year of Oldest	Year of Newest
New England	1979.5	1986.8
Mid-Atlantic	1976.7	1987.5
South	1974.6	1986.2
Midwest	1978.2	1986.5
West	1974.7	1985.6
All Sections	**1976.7**	**1986.5**

Percent Buying This Year

	New Truck	New Tank
New England	19.4	5.6
Mid-Atlantic	25.0	1.0
South	28.6	28.6
Midwest	24.4	17.1
West	41.5	14.6
All Sections	**27.8**	**13.4**

TABLE 14
Average Drop in Gallons

	275-gal. Tanks	550-gal. Tanks
New England	174.5	349.6
Mid-Atlantic	190.3	347.9
South	177.3	350.2
Midwest	169.8	370.0
West	178.2	360.6
All Sections	**178.0**	**355.7**

TABLE 15
Percent Using Two-Way Radio

New England	65.9
Mid-Atlantic	63.4
South	57.1
Midwest	68.3
West	56.1
All Sections	**62.2**

homeowners who no longer feel any loyalty to companies that had served them for many years.

Commercial/industrial customers dropped again this year, from 208 in 1990 to 184 per marketer. The South took a real axing, but some other sections posted gains in C/I business. We hope the overall 10% change from last year doesn't signal a trend but only a statistical deviation. Last year's figure was 10% below the year before also.

The average residual oil volume per marketer was much higher than last year's average, which was double 1989. We can't explain why.

Table 5 also shows the average number of employees per marketer responding to our questionnaire. The figure of 10.5 is almost two people per dealer less than 1990. New England marketers on average dropped four employees, while the other sections reported small reductions in their work forces — except the South, which was up 1.3 people per company.

It's no mystery as to where the fuel oil is being sold by marketers. **Table 6** shows that nearly 80% of their customers are private homes, with commercial and industrial customers representing a combined 16.1% and the remainder apartments, educational institutions, hospitals and "other" (which we didn't bother to list) such as agricultural.

This table hasn't changed much in the 12 years we've published it, so it's evident that there hasn't been any shift in the market characteristics for our industry, nor is

there likely to be any change in the future. Single family homes are the heating oil marketer's bread and butter.

Dollars and Cents

Tables 7 and **8** are pretty self-explanatory and show the percentage of marketers who reported dollar revenues and pre-tax earnings at the levels indicated.

More than three-quarters of our panel have total revenues of under $5 million (categories 1 and 2 of Table 7) and pre-tax earnings of less than $200,000 (categories 1-3 of Table 8). Neither table shows much change from previous years — the majority of oil heat marketers are small companies, with only a few "Petros" around.

TABLE 16
Dealers Trading on the Oil Futures Market

New England	65.9
Mid-Atlantic	34.1
South	5.7
Midwest	4.9
West	*
All Sections	**22.1**

* - Less than 0.1%

Computers

More than two-thirds of the marketers we polled said they use computers for at least some of their operation, as shown in **Table 9**. More than 80% of the Mid-Atlantic marketers checked "yes" to this question, the highest group. Only 48.6% of Southern dealers said they use computers, the only section with less than a clear majority.

Once again, Northeast marketers are more heavily involved in retail fuel oil sales, with all respondents saying that it is a primary source of income.

The overall trend toward the use of computers is nicely demonstrated in **Figure 5**, which shows the percentage who responded positively to this question over the past 13 years. With the ever cheaper price of computer hardware and growing acceptance of PCs in the workplace, it's hard to believe that anyone would still be holding out. If nothing else, computers are wonderful for doing word processing (even IBM is out of the typewriter business!).

Table 10 reveals how marketers are using their computers. Accounts receivable/billing leads the list with more than 85% of the marketers who said "yes" in Table 9 using their computers for this function. General ledger is second, with accounts payable and excise tax third and fourth, respectively. The top three are unchanged from last year (their overall rank, not the percentages).

Computers used to be the hot topic in the industry but they've become so commonplace that they're scarcely worth talking about much anymore. There seem to be a growing number of vendors who are selling software packages to marketers. The latest thing is heat loss calculation programs, which have become quite sophisticated and easy to use. We counted at least three different firms showing such products at industry trade shows this past year.

Of course integrated heating oil marketing software has come a long way since the 1970s when it was first introduced via time-sharing services such as Petrodata. Now they're being run on PCs with the cost a great deal less than systems just a few years ago. You also get more for your money as the software has been continuously improved and expanded.

Rolling Stock

As computers get cheaper, trucks get more expensive. The result is that marketers are reducing their rolling stock as shown in **Figure 4**. In the 13 years that we've been tracking the average number of trucks per marketer, there has been two periods of steady decline. The first from 1981 to 1985 and the second since 1986. The "peaks" in this chart correspond with the periods when fuel oil volume increased as shown back in Figure 2.

TABLE 17
Dealers Operating Bulk plants (in %)

	With Bulk Plants	Bulk Plants Storing Other Products
New England	39.0	68.8
Mid-Atlantic	51.2	57.1
South	80.0	89.3
Midwest	87.8	91.7
West	80.5	81.8
All Sections	**67.7**	**77.7**

The average marketer now operates four delivery trucks, down 0.9 from 1990. In addition, marketers operate an average of two tractor-trailers, up 0.5 from last year.

To compensate for the long-term reduction in the fleet size, marketers are increasing the size of the tanks they carry on the rigs they retain. The average size for the largest tank in dealer fleets is 3,060 gals., compared with 2,775 gals. last year. The average size of the smallest delivery truck tank is 2,115 gals., up 37 gals. from the figure posted last year, which was

TABLE 18
Average Storage Capacity in Gals.

	No. 2 Oil	Diesel	Gasoline	Lpg	Kero
New England	99,133	17,500	ID	ID	23,000
Mid-Atlantic	191,316	10,000	57,625	ID	17,125
South	78,333	27,857	59,632	ID	29,750
Midwest	30,283	21,888	31,667	27,600	11,600
West	86,517	92,000	105,333	20,333	ID
All Sections	**97,116**	**33,849**	**63,564**	**ID**	**20,369**

ID - Insufficient Data

Circle No. 47 on Card

TABLE 19
Dealers Using Additives (In %)

	Using Additives	Blended at Bulk plant	Blended on Trucks	Blended in Cust Tanks
New England	51.2	23.8	33.3	52.4
Mid-Atlantic	46.3	10.5	36.8	57.9
South	28.6	*	30.0	70.0
Midwest	70.7	34.5	62.1	24.1
West	51.2	33.3	52.4	61.9
All Sections	**49.6**	**20.4**	**42.9**	**53.3**

* - Less than 0.1%

TABLE 20
Percent of Fuel Oil Dealers Who Sell, Install and/or Service All Types of HVAC Equipment

New England	90.2
Mid-Atlantic	97.6
South	31.6
Midwest	22.0
West	39.0
All Sections	**56.1**

TABLE 21
Sources of Business Income (% of dealers reporting)

	Heating Equipment			
	Retail	Wholesale	Air Conditioning	Other
New England	87.8	7.3	31.7	14.6
Mid-Atlantic	87.8	14.6	36.6	22.0
South	22.9	2.9	11.4	10.5
Midwest	22.0	9.8	12.2	17.1
West	36.6	4.9	4.9	22.0
All Sections	**51.4**	**7.9**	**19.4**	**17.2**

TABLE 22
Trends in Equipment Sales Past 12 Months (% of dealers reporting)

	Residential Up	C/I Up
New England	29.7	31.6
Mid-Atlantic	39.0	2.4
South	ID	ID
Midwest	55.6	0.1
West	50.0	12.5
All Sections	**43.6**	**11.7**

ID -Insufficient Data

up a similar amount from the year before that.

Marketers' ideal tank size hasn't risen, however. This year it's 2,608 gals., compared with 2,645 gals. in '90. We asked dealers what they thought was the optimum size tank for their particular area and needs and this was the average figure they came up with.

Gasoline vs. diesel; steel vs. aluminum... two questions we ask every year with predictable results. The national figures in **Table 12** haven't changed much, and most of the regional changes are toward the "both" column in engine and tank construction categories.

The number of New Englanders who operate diesel-only fleets is up 10% from last year; the number of gasoline-only fleets is about the same. There were similar but less dramatic changes in the other sections. In terms of preference, virtually the same share gave the nod to diesel this year (63.7% nationwide in '91 vs. 68.0% last year).

A majority of dealers (57.4%) prefer aluminum tanks. However, steel-only fleets are more prolific with 36.3% of our marketers saying all their tanks are steel compared with just 21.5% that are all-aluminum and 39.7% that have both steel and aluminum tanks.

The age of truck fleets is another important industry indicator. It makes sense that for the age of marketer fleets to maintain status quo, the difference between the average age of the oldest and newest trucks should go up one year with every survey. If it goes up more than

Fig. 4: Average Number of Delivery Trucks Per Marketer 1978-1991

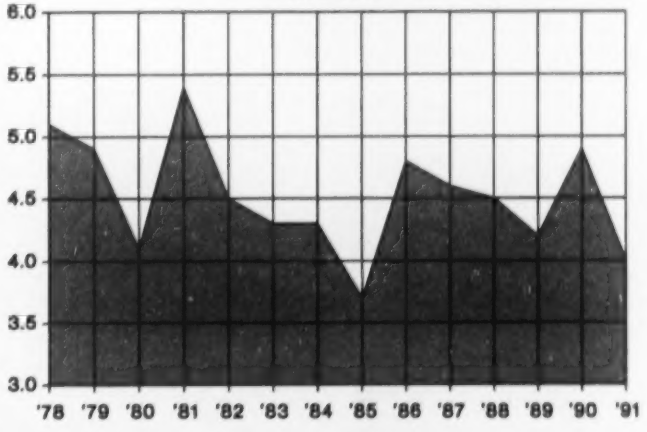


TABLE 23
Percent of Fuel Oil Dealers Who Sell, Install and/or Service Selected HVAC Equipment

RESIDENTIAL

	Oil Burners	Gas Burners	Domestic Hot Water	Boilers	Hydronic Systems
New England	100.0	48.6	81.1	78.4	54.1
Mid-Atlantic	97.6	41.5	87.8	85.4	68.3
South	100.0	37.5	62.5	37.5	*
Midwest	77.8	44.4	66.7	44.4	11.1
West	100.0	43.8	50.0	62.5	31.3
All Sections	**95.1**	**43.2**	**69.6**	**61.6**	**33.0**

COMMERCIAL

	Oil Burners	Gas Burners	Domestic Hot Water	Boilers	Hydronic Systems
New England	73.0	27.0	64.9	45.9	37.8
Mid-Atlantic	63.4	29.3	43.9	51.2	31.7
South	62.5	25.0	37.5	25.0	*
Midwest	11.1	22.2	*	22.2	11.1
West	75.0	31.3	43.8	43.8	25.0
All Sections	**57.0**	**30.0**	**38.0**	**37.6**	**21.1**

* - Less than 0.1%

one year, it indicates that marketers are upgrading their fleets at a faster pace. If it doesn't go up at least one year, marketers are holding off on buying new rigs.

The average age of marketer fleets in 1990 was 1978.8, which was arrived at by averaging the ages of the oldest and newest trucks in marketers fleets. This year, the number is 1981.6, almost three years more! This figure means that dealers are making fleet replacements at a much greater pace than last year. It's an indication that the "wait-and-see" posture taken by many as a result of the Middle East crisis and mild winters has ended as marketers finally begin to make overdue replacements of trucks that were used beyond their normal life spans.

The average age of the oldest truck in marketer fleets is about 15 years (1976.7). That's up from 1974.5 last year, which means that the oldest trucks are on the road to a lesser degree. The average age of the newest trucks is 1986.5, up from 1983.0 last year. This figure further suggests that dealers have replaced old trucks this year.

When asked if they were planning to purchase a new truck within the next 12 months, 27.8% said "yes." That's down about 1.3% from the number who answered positively to this question last year. Another 13.4% plan to put a new tank on an existing truck. That's about 0.8% less than last year.

Trucks represent the biggest investment for a marketer short of a building or tank farm. Truck and tank manufacturers are important suppliers to the oil heating industry and their performance is an excellent barometer of how the industry itself is doing. When the tank truck guys are slow, the oil heating marketers are slow too.

Trucks deliver the life's blood of the heating oil industry, and a marketer's average delivery is about 178 gals. to 275-gal tanks, according to our survey. For 550-gal. tanks, the average delivery is 355.7 gals. **Table 14** shows that there isn't much variation between the sections. The bottom line is practically identical to last year's totals of 176.7 gals. and 358.3 gals., respectively.

Trucks also carry two-way radios, so say 62.2% of our respondents. That figure, shown in **Table 15**, is down four points from last year. Western dealers use radios the least — only 56.1% said they have them, which is still a majority.

Table 16 shows the percentage of marketers who trade oil futures. This figure of 22.1 is nearly double the 11.9% posted in 1990, and is the highest figure recorded since we began asking this question several years back.

Futures trading is a tricky business and can get you in a lot of trouble if you aren't very careful. Marketers who use it as a hedging tool can improve their profitability, but speculators can get wiped out faster than in Atlantic City. A growing number of marketers are using the New York Mercantile Exchange to secure product pricing guarantees in order to offer fixed price contracts to customers. This tactic has been very effective to marketers who have tried it the past two winters.

New Englanders seem to be most heavily involved with futures, judging from the results of our survey. More than 65% said they were trading in oil futures. The Mid-Atlantic, which was once the leading area of futures traders partly because of its proximity to the delivery locations of NYMEX futures, is second with 34.1%. Last year only 13.6% of the Mid-Atlantic marketers surveyed said they traded futures.

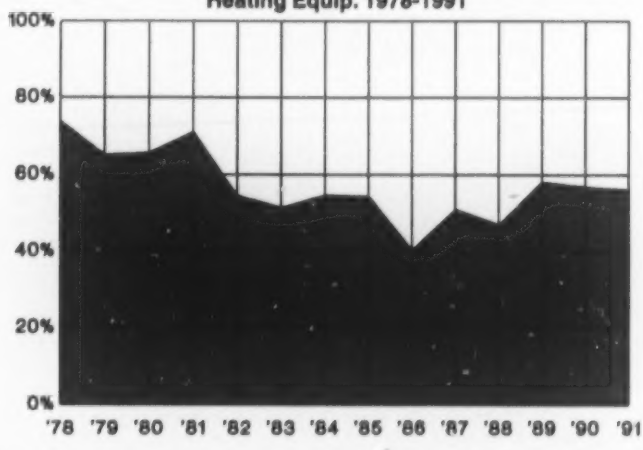
Bulk Plants

About the same percentage of marketers as last year indicated that they operate bulk plants for the storage of heating oil. **Table 17** shows that 67.7% of the marketers questioned said they do have distillate storage. Of that group, 77.7% also store other fuels such as kerosene, gasoline, diesel and Lpg.

Table 18 shows the average capacities for various petroleum products stored at marketer bulk plants. Far and away the largest is No.2 oil, with an average capacity of more than 97,000 gals. That's down more than 100,000 gals. from 1990.

Marketers also store an average of 63,564 gals. of gasoline, 33,849 gals. of diesel and 20,369 gals. of kerosine. That's a combined total of nearly 215,000 gals., not including Lpg, which we weren't able to get

Fig. 5: Percentage of Marketers Who Sell/Install/Service Heating Equip. 1978-1991



enough responses on to make a valid extrapolation. If all the tanks were full, that would represent a considerable inventory worth as much as $350,000 or more. Not turning over this inventory would hurt most organizations severely, and slow turnover was indeed a factor last winter for most Northeast oil heat marketers.

A growing number of marketers are using additives, which many say is because of the erratic quality of fuel oil these days. Nearly half (49.6%) say they use additives, 5% more than so stated last year. These additives are blended either at the bulk plant (said 20.4% of our panel), on trucks (said 42.4%) or right in the customer tanks (as do 53.3% of the marketers surveyed). Some do a combination of two or three of these, which is why the figures don't add up to 100%.

Mid-Atlantic and Southern dealers use additives the least. Midwesterners are at the other extreme with 70.7% of our respondents using additives in their fuel oil. **Table 19** shows the results of the additives questions.

TABLE 24
Percent of Fuel Oil Dealers Who Sell, Install and/or Service Selected HVAC Equipment

RESIDENTIAL

	Unitary Air Conditioning	Electric Resistance	Insulation	Solar
New England	32.4	*	2.7	2.7
Mid-Atlantic	31.7	14.6	4.9	9.8
South	12.5	12.5	25.0	*
Midwest	33.3	11.1	*	*
West	12.5	*	*	6.3
All Sections	**24.5**	**7.6**	**6.5**	**3.8**

COMMERCIAL

	Unitary Air Condition	Electric Resistance	Insulation	Solar	Refrig
New England	8.1	*	*	*	*
Mid-Atlantic	7.3	2.4	2.4	2.4	7.3
South	12.5	12.5	12.5	*	*
Midwest	*	*	*	*	*
West	6.3	*	*	6.3	6.3
All Sections	**6.8**	**3.0**	**3.0**	**1.7**	**2.7**

* - Less than .1%

Heating Machines

Figure 6 shows a continuation of the disturbing decline in the percentage of marketers who sell, install and/or service HVAC equipment over the past 13 years. The percentage in **Table 20** (56.1%) is down a fraction from last year, which in turn was down nearly two points from the figure posted in 1989 (58.1%), and the overall trend is downward as indicated in the graph.

New England and Mid-Atlantic areas actually showed increases in this area in 1991, more than 30% in the case of the Mid-Atlantic. However, reductions in the other regions offset the gains in the Northeast, resulting in an overall percentage just below 1990.

What makes the downward trend ironic is that it comes at a time when the principal advertising message being promulgated by the industry is its attention to service. This theme, the brainchild of the East Coast Energy Council, is the cornerstone of the group's advertising program in the Northeastern markets, which is being picked up by other groups as well. It becomes a bit embarrassing to publicize a trend away from that which you are boasting. We said this last year as well, but since the utilities are now engaged in aggressive conversion campaigns of their own, the oil heat industry is even more vulnerable.

Retail heating equipment sales is an important source of income to 51.4% of the marketers surveyed nationwide, according to **Table 21**. Once again, it's much more important to marketers in the Northeast than in the other sections of the country.

Wholesale equipment sales is important to only 7.9% of our panel,

TABLE 25
Percent of Fuel Oil Dealers Who Sell, Install and/or Service Selected HVAC Equipment

RESIDENTIAL

	Furnaces	Warm Air Systems	Central Air Condition	Heat Pump	Cont Air Circ
New England	97.3	83.8	27.0	8.1	2.7
Mid-Atlantic	95.1	78.0	53.7	26.8	7.3
South	100.0	75.0	50.0	12.5	*
Midwest	66.7	55.6	44.1	11.1	11.1
West	93.8	62.5	18.8	12.5	12.5
All Sections	**90.6**	**71.0**	**38.7**	**14.2**	**6.7**

COMMERCIAL

	Furnaces	Warm Air Systems	Central Air Condition	Heat Pump
New England	64.9	40.5	*	*
Mid-Atlantic	51.2	41.5	22.0	14.6
South	37.5	25.0	37.5	12.5
Midwest	11.1	*	11.1	*
West	68.8	50.0	25.0	12.5
All Sections	**46.7**	**31.4**	**19.1**	**7.9**

* - Less than .1%

and air conditioning is important to 19.4%. "Other," including swimming pool maintenance, trucking, TBA and a host of other diversified businesses, is an important source of income to 17.2% of the marketers quizzed.

Ironically, more marketers said that 1991 was a better equipment sales year than 1990, as shown in **Table 22**, despite the fact that overall fewer marketers reported reliance of heating equipment as an important source of business income. Some 43.6% said residential sales were up, compared with 23% who said residential sales increased in 1990 over 1989.

The commercial/industrial side didn't fare so well, with just 11.7% indicating business was better in '91 than 1990. Last year, 15.5% said C/I sales were above 1989, and this figure also was down from the prior year.

TABLE 26
Average Number of Units Installed in Past 12 Months

	RESIDENTIAL			COMMERCIAL		
	Burners	Boilers	Furn	Burners	Boilers	Furn
New England	22.2	23.2	11.8	3.6	3.0	1.0
Mid-Atlantic	13.7	22.7	12.8	7.3	3.8	3.0
South	8.7	2.3	48.0	ID	ID	ID
Midwest	3.0	8.0	33.6	ID	ID	ID
West	17.0	18.8	18.4	3.0	1.2	3.0
All Sections	**12.9**	**15.0**	**24.9**	**4.6**	**2.7**	**2.3**

ID - Insufficient Data

What They Sell

Tables 23, **24** and **25** show the percentages of marketers who handle the type of equipment listed. Residential oil burners is the top category, but just 5% ahead of residential furnaces. Very few dealers still handle solar or insulation, hot topics just a few years ago. With the price of oil soaring, however, this number could change.

Typically, hydronics is more prevalent in the Northeast than in other parts of the country. Some 85.4% of the Mid-Atlantic and 78.4% of the New England marketers polled handle boilers compared with less than 50% in the South and Midwest. Interestingly, the West showed a healthy increase in the percentage of dealers who install residential boilers (62.5% vs. 25.9% last year).

Table 26 gives some average numbers of the units being installed by marketers. For the first time, residential furnaces and boilers exceed burners. This trend might be because marketers have refocused their attention away from replacing burners to upgrading complete systems. It really doesn't pay to put a flame retention burner into a boiler or furnace that's on its last legs and won't provide efficient heating regardless of how good the new burner is.

Table 26 also shows that fewer units per marketer are sold on the commercial side. Historically, marketers have never been too strong in the commercial/industrial market.

Table 27 gives a breakdown on service departments. Once again, the number of marketers who service equipment is down from last year... unfortunately, the appearance of a trend. This year, 56.0% of our panel nationwide said they operated in-house service departments.

The New England and Mid-Atlantic regions showed gains, similar to what was seen in Table 20, but losses in the other regions pulled down the national figure to 1.5% below 1990. Fewer than 30% of the Southern and Midwestern marketers polled said they have in-house service.

TABLE 27
The Service Department

	% Have Service Depart	Avg No. Calls Per Year	Value of Parts Inven-tory	% Service Depart Profitable	No. of Techs
New England	92.7	1,287	$26,500	55.3	3.3
Mid-Atlantic	97.6	1,872	41,000	37.5	4.4
South	28.6	1,209	18,944	50.0	2.6
Midwest	24.4	538	40,570	33.3	2.3
West	36.6	1,110	29,250	73.3	3.8
All Sections	**56.0**	**1,203**	**$31,253**	**49.9**	**3.3**

TABLE 28
Service Trucks

	Avg No. per Mktr.	% Buying New Vans in '90	No. of Vans Buying
New England	3.4	27.8	1.0
Mid-Atlantic	5.3	37.5	1.7
South	2.2	ID	ID
Midwest	3.0	10.0	ID
West	3.7	13.3	1.0
All Sections	**3.5**	**22.2**	**1.2**

ID - Insufficient Data

The average number of service calls made is 1,203, down about 440 from last year. We again forgot to clarify this question so we aren't sure how many of the marketers included annual tuneups in this figure and how many counted just breakdowns. In any event, the fewer calls can be attributed to the mild winter because systems didn't have to work as hard so didn't break down as often.

The average marketer with a service department carries around $31,200 in parts inventory, according to our survey. That's down $8,000 from last year, not surprising in light of the fact that the number of service calls is down.

Just less than half of the service departments are profitable, virtually identical to last year, suggesting a growing number of marketers operate at break-even or better.

TABLE 29
The Gas Threat

	% Saying Gas a Major Threat	% Losing Customers	Avg No. Lost	% Taking Steps to Combat	% Making Gas Convers
New England	56.1	73.2	12.0	43.9	12.2
Mid-Atlantic	56.1	82.9	8.9	65.9	31.7
South	75.0	100.0	14.5	62.5	25.0
Midwest	91.7	100.0	21.6	50.0	16.7
West	68.8	81.3	46.2	75.0	18.8
All Sections	**69.5**	**87.5**	**20.6**	**59.5**	**20.9**

Last year, some 49.4% operated profitably, and in 1989 45.9% said their departments were profitable, so the short-term trend is upward. The main drop occurred in the Mid-Atlantic and Midwest, which went from 48.1% and 55.6% profitable, respectively, last year to just 37.5% and 33.3% in '91.

The number of technicians on the payroll also went down this year, nearly two persons per marketer. Last year, the average marketer with a service department employed 4.9 technicians. Now they've got only 3.3 mechanics, which is close to the 1989 figure of 3.1 technicians per company.

We expanded the service questions two years ago to include the number of marketers planning to buy new service trucks in the next 12 months. The average marketer has 3.5 service vans now (that's down from 5.1 vans per dealer last year). About 22% say they're going to buy new vans in 1991. The average number they're planning to buy is 1.2 vans.

Marketing

More than two-thirds (69.5%) of our panel say that natural gas is a major threat to their businesses. That's 11% more than last year. Also, almost 20% more said they are losing customers to natural gas — 87.5% this year vs. 71.3% in 1990.

Midwestern and Southern dealers seem particularly vulnerable, with nearly all reporting that gas is a major threat and all saying they're losing customers to the competitive fuel. See **Table 29** for more details.

The average dealer lost about 20.6 customers this past year, but just 59.5% said they're taking steps to combat these loses. When all else fails, about 20.9% will do the actual conversion to gas. We're happy that this number is down from 24.3% who said they did gas conversions last year.

Table 30 shows the percentage of dealers who recommend equipment replacement in the listed circumstances. There has been some repositioning with regard to rank from last year, but not with regards to the top five reasons.

We like to show **Table 31** to our advertisers simply because it encourages them to keep advertising. Nationally, 77% of the dealers surveyed said that they recommend equipment replacement by brand

TABLE 30
Percent Recommending Equipment Replacement Under Following Conditions

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Boiler leaks	85.4	85.4	87.5	41.7	50.0	70.0
Unit continuously problematic	70.7	63.4	100.0	41.7	50.0	65.2
Operates with no problems, but old & inefficient	65.9	75.6	62.5	41.7	68.8	62.9
Emits fumes	63.4	51.2	87.5	16.7	56.3	55.0
Breaks down	39.0	41.5	50.0	25.0	31.3	37.4
Unit is inefficient (but not necessarily old)	53.7	39.0	25.0	25.0	37.5	36.0
Homeowner objects to heating bills	36.6	53.7	12.5	25.0	43.8	34.3
Homeowner threatens to convert to another fuel	19.5	31.7	*	25.0	37.5	22.7

TABLE 31
Dealers Who Recommend Equipment Replacement by Brand

	% Recommend Brand Names	% of Cust Following Recom
New England	85.4	89.1
Mid-Atlantic	82.9	92.9
South	100.0	66.3
Midwest	41.7	84.0
West	75.0	89.8
All Sections	**77.0**	**84.4**

TABLE 32
Percent Indicating Major Factor in Brand Selection

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Quality of construction	78.0	78.0	87.5	66.7	62.5	74.5
Combustion efficiency	58.5	75.6	75.0	66.7	81.3	71.4
Ease of service	51.2	58.5	50.0	33.3	18.8	42.4
Quietness	17.1	19.5	75.0	33.3	25.0	34.0
Low incidence of service	39.0	34.1	37.5	16.7	31.3	32.1
Durability	36.6	34.1	25.0	50.0	12.5	31.6
Long warranty	31.7	19.5	37.5	25.0	25.0	27.7
Low retail price	9.8	12.2	50.0	33.3	12.5	23.6
Compactness	7.3	12.2	50.0	16.7	6.3	18.5
High markup opportunity	7.3	9.8	*	16.7	6.3	8.0
Light Weight	7.3	4.9	*	25.0	*	7.4

* - Less than .1%

name, and 84.4% of the recommendations are followed. That means that the dealer has a lot of clout with the buyer, who trusts the marketer's judgment most of the time. Incidentally, the figures are even higher in the Northeast, where the bulk of oil heating equipment is sold.

Why do dealers select equipment? **Table 32** provides a consensus of opinion on the various factors affecting their selection. Quality of construction, combustion efficiency, ease of service and quietness are the top four factors. Only quietness is changed from last year, when low incidence of service was in the fourth spot but has now slipped to fifth. There are some differences between the regions, but overall, these factors are pretty consistent year-to-year.

Table 33 was started two years ago. We added these questions in order to find out if marketers finally have gotten up off their duffs in order to get new business. There have been too many years of waiting for the phone to ring on the part of the oil heat industry, which gave the competition the opportunity to take a lot of business away from it.

What does Table 33 indicate? Some good news and some bad. First the good: Better than 70% of the marketers polled do at least some advertising of their own in addition to whatever is being done by their associations. Something less than half are doing direct mail, which may be good in a way.

In the past, many marketers totally relied on bill stuffers as their sole means of communicating with their customers. Of course, this means of communication didn't sell new business and has been demonstrated to be a poor way of publicizing products and services. Perhaps the fact that less than half of the marketers polled say they do direct mail means that at least they've begun to recognize that "cheap" isn't the only criteria.

The bad news is that only 34.1% recognize the effectiveness of public relations and understand how to use it. This figures at least is up 10% from last year and closer to the 35% recorded when we first asked this question in 1989. Public relations is a very effective means to publicize a company and build its image in the community. There are a number of ways of accomplishing it, such as through sponsorship of little league teams, donations to community causes, articles in the local newspapers and so forth.

The worst news is that only 48.9% of our panel belong to their local oil heat trade association,

TABLE 33
How Dealers Market Their Products (% indicating they use listed strategies)

	Advertising	Direct Mail	Public Relations	Belong to Trade Assn.
New England	82.9	51.2	34.1	70.7
Mid-Atlantic	70.7	43.9	36.6	70.7
South	65.7	34.3	31.4	37.1
Midwest	78.0	31.7	24.4	24.4
West	68.3	48.8	43.9	41.5
All Sections	**73.1**	**42.0**	**34.1**	**48.9**

TABLE 34
Retail Gasoline Outlets and Volume

	Avg. No.	Less Than 50,000*	50,000 - 100,000*	100,000 +*
New England	ID	ID	ID	ID
Mid-Atlantic	6.0	50.0	25.0	25.0
South	6.2	53.8	30.8	15.4
Midwest	2.8	47.1	35.3	17.6
West	2.3	42.9	42.9	14.3
All Sections	**4.3**	**48.5**	**33.5**	**18.1**

* Percent reporting such volume in gals. per month.

TABLE 35
Industry Publications Most Helpful to Dealers In Operating Their Fuel Oil Businesses (% reporting)

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Fuel Oil News	80.5	82.9	85.7	85.4	82.5	83.4
Fueloil & Oil Heat	61.0	78.0	20.0	14.6	42.5	43.2
National Petroleum News	4.9	7.3	37.1	29.3	37.5	23.2
Petroleum Marketer	*	4.9	17.1	9.8	15.0	9.4
Petroleum & C-Store Products	*	2.4	14.3	22.0	7.5	9.2
Contractor	9.8	9.8	5.7	4.9	*	6.0
Other	7.3	2.4	5.7	*	5.0	4.1
Journal of Petroleum Marketing	2.4	2.4	5.7	7.3	2.5	4.1
Oil Daily	4.9	2.4	*	2.4	2.5	2.4
Snips	4.9	*	2.9	*	*	1.6

* - Less than .1%

down three points from last year, which was 4% less than 1989. That's a disgrace considering all that is being done to coordinate a national effort on behalf of oil heat. It means that nearly half of the marketers in the country are getting a free ride!

Miscellaneous

Marketers operate an average of 4.3 gasoline outlets, just under half of which have volumes of less than 50,000 gals. per month. This number is reported in **Table 34**.

Surprisingly, Midwesterners have one of the lowest average and Southerners marketers the highest. The national average is down 0.5 units from the 1990 figure posted, and a smaller percentage of the stations report less than 50,000 gal. volume than in previous years.

Our traditional last question — **Table 35** — shows that *Fuel Oil News* is still the most helpful publication to dealers. We're way out in front as usual, which, quite naturally, gratifies us a great deal.

The Verdict

This report, then, is our 1991 assessment of the heating oil industry. We closed our 1990 survey saying there will be "continued turmoil as factors over which the oil heating industry has no control will impact the viability of their businesses. High prices will take their toll as competitive fuels will be able to make further inroads into customer bases thanks to aggressive advertising and marketing."

Once again, our prediction was right on the money.

All in all, the upcoming year appears to be one that will be very interesting — another prediction that tends to be true every year! There will be some dramatic moments in the year ahead — the clash between utilities and oil heat could come to a tense confrontation. New natural gas pipelines coming into the Northeast are expected to go on-stream soon. How effectively the oil heat industry can deal with this dilemma might well signal the future of the marketplace.

We hope that the figures provided herein help you determine how you stack up vs. your peers and how you can effectively operate your businesses. For manufacturers, we hope these statistics will give you a better picture of how best to serve the oil heating industry. ***F•N***